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Aldo Leopold on Agriculture

Abstract
Robert Sayre, former member of the Leopold Center's Advisory Board, describes the Land Ethic and its relation to agriculture in this short essay.

Keywords
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Aldo Leopold on Agriculture

By Robert E. Sayer
Advisory Board member, Leopold Center for Sustainable Agriculture

Sayre is professor emeritus of the University of Iowa Department of English. He has a longtime interest in autobiographical writing, Thoreau, American Indian literature, and landscape and culture. He has edited a number of books including *Take This Exit: Re-Discovering the Iowa Landscape* (1989), *Take the Next Exit: New Views of the Iowa Landscape* (2000), and *Recovering the Prairie* (1994).

Page references are to A Sand County Almanac (Ballantine Books ed., 1970).
Photo courtesy of the Aldo Leopold Foundation.

What did Aldo Leopold have to say about farming?

The question is of natural interest to supporters of the Leopold Center for Sustainable Agriculture. It is also worth asking because Leopold himself was not a farmer, although he did own a farm. That farm was the site of many of the experiences and observations in *A Sand County Almanac*, his modern classic of ecological writing.

Leopold was born in Burlington, Iowa, in 1887, the son of a middle-class manufacturer. As a boy he loved hunting and wild nature, interests which led him to attend the Yale School of Forestry, where he trained for work in the National Forest Service and graduated in 1909. His early specialty was game management, and by the 1930s he was a national authority on this subject. His book on it was published in 1933, and that summer the University of Wisconsin appointed him to the Department of Agricultural Economics as the nation's first professor of game management.

In those days game was managed primarily for hunters, and the principal means of increasing the stock was to control predators and limit hunting seasons. Leopold and others began to realize that habitat was even more essential to building game populations. He had started to think as an ecologist. Consequently, in 1935, when he and his wife Estella bought a run-down farm along the Wisconsin River, in Sauk County, they began to use it not only as a weekend and vacation place for their five children but also as an experiment in land restoration. The farm had last been occupied by a bootlegger, who left it a barren sand flat with only a chicken coop on it. The Leopolds named the farm "the Shack" and began to plant trees, shrubs, grasses, and a garden.

As an ecologist, Leopold also became deeply concerned about land itself. There were, he wrote, two different groups of conservationists. "One group (A) regards the land as soil, and its function as commodity-production; another group (B) regards the land as a biota, and its function as something broader." (pp. 258-9) Group B would be concerned not just with yields of trees, crops, or animals, but with their variety and quality, their effect on the organisms in the soil, on water quality, and a whole range of other matters that once might have been called just "side effects."

He further recognized that farming was one of the most complex arenas for conservation. "Scientific agriculture was actively developed before ecology was born," he wrote; "hence a slower penetration of ecological concepts

might be expected. Moreover the farmer, by the very nature of his techniques, must modify the biota more radically than the forester or the wildlife manager." (p. 260) Yet farmers were the major holders of land in the Middle West, so their decisions were crucial to wildlife, rivers, woods, and all other life. Leopold was repeatedly asked to speak to farmers and to write in farm magazines.

Leopold also recognized that general principles in land use and conservation had very important applications to farmers. The primary one, perhaps, is his "land ethic," which he summarized as follows: "quit thinking about decent land-use as solely an economic problem. Examine each question in terms of what is ethically and esthetically right, as well as what is economically expedient. A thing is right when it tends to preserve the integrity, stability, and beauty of the biotic community. It is wrong when it tends otherwise." (p. 262)

He called this short but profound principle an "ethic" and "esthetic" because he realized that it would often oppose people's short-term economic interests. Nor could this principle be easily legislated. It depended on fundamental changes in attitudes and values. To "bait the farmer with subsidies to induce him to raise a forest, or with gate receipts to induce him to raise game" might be fine for a while, but what would happen when the subsidies and gate receipts ended? Such policies were also a frank admission "that the pleasures of husbandry-in-the-wild are as yet unknown both to the farmer and to ourselves." (p. 293)

He was aware, however, that most farmers are very conscious of the appearance of their fields and farmsteads. The need is to change the standards of beauty and health. "There is, as yet, no sense of pride in the husbandry of wild plants and animals, no shame in the proprietorship of a sick landscape." (p. 168)

What did constitute beauty and health and long-term interests? "The most important characteristic of an organism is that capacity for internal self-renewal known as health." (p. 272) To judge the health of cultivated land, Leopold urged comparing it to large tracts of wild land, where native plants and animals regenerated themselves and kept one another in balance. Native prairie species practiced "`team work' underground by distributing root-systems to cover all levels, whereas the species comprising the agronomic rotation overdraw one level and neglect another, thus building up cumulative deficits." (p. 275)

So the health of land could not be measured just by increasing yields. "...The marvelous advances in technique made during recent decades are improvements in the pump, rather than the well. Acre for acre, they have barely sufficed to offset the sinking level of fertility." (p. 260)

Meanwhile, his personal sympathy for farmers can be found in remarks like, "there are two spiritual dangers in not owning a farm. One is the danger of supposing that breakfast comes from the grocery, and the other that heat comes from the furnace." (p 6) (Leopold heated the Shack with wood.) He also sympathized with the fact that farming is often grueling labor and that farmers, especially dairy farmers, are often chained to their farms. "Theoretically, the mechanization of farming ought to cut the farmer's chains, but whether it really does is debatable." (p. 262)

Equally important, Leopold recognized that no one, farmers included, could avoid considering "economic feasibility." "It of course goes without saying that economic feasibility limits the tether of what can or cannot be done for land. It always has and it always will." (p. 262) But the "bulk of all land relations," he wrote, "is determined by the land-user's tastes and predilections, rather than by his purse." How people invest their "time, forethought, skill, and faith" is a matter of their "predilections." (p. 263)

A Sand County Almanac is both pleasant and timely reading. Leopold, a real down-to-earth writer, could make very important, complex ideas very clear. And he challenges us to go further in applying his general principles to specific conditions. That, indeed, is the goal of the projects supported by the Leopold Center for Sustainable Agriculture: applying ecological concepts to farming. The key words in his land ethic are also a definition of sustainable agriculture: it aims "to preserve the integrity, stability, and beauty of the biotic community."